CHAPTER 1: INTRODUCTION

This document has been developed to assist EPA Region VIII states and Indian tribes with developing the antidegradation policies and implementation procedures required under the Clean Water Act (CWA) 303(c) water quality standards program. The document includes a brief introduction to antidegradation concepts, provides a Region VIII-recommended (model) approach to implementing antidegradation requirements, identifies key issues that must be addressed by state and tribal antidegradation programs, presents background information relevant to antidegradation, and discusses how a number of antidegradation issues have been addressed by the states.

What is antidegradation?

An antidegradation policy is one component of a state/tribal water quality standards regulation. Such policies may apply to any activity that has the potential to affect existing water quality. Antidegradation policies are adopted to maintain and protect the quality of all surface waters, though the level of protection provided to a specific waterbody depends upon a number of factors. The highest level of antidegradation protection, known as tier 3, is granted to Outstanding National Resource Waters (ONRWs). These waters typically possess outstanding ecological or recreational attributes. Although many such waters have very high water quality, outstanding water quality as measured by parameters such as pH and dissolved oxygen is not a prerequisite for designation. Under antidegradation tier 3, new or increased sources of pollution that would lower the water quality of an ONRW are not permitted.

Antidegradation policies are adopted to maintain and protect the quality of all surface waters.

The second level of protection, known as tier 2, is provided to waters (or parameters) where existing water quality exceeds levels necessary to protect fishable/swimmable designated uses (i.e., high quality waters). Antidegradation maintains and protects the quality of such waters by specifying the circumstances under which proposed activities that will lower water quality may be allowed. The basic function of tier 2 is to ensure that, where degradation is allowed, it is allowed for a good reason and is minimized in a reasonable manner, subject to public review. Thus, tier 2 is not intended to be an absolute barrier to degradation of water quality but rather a process to carefully consider whether allowing degradation makes sense.

Implementation of tier 2 is fundamentally different than implementation of tier 3 in that *degradation may be allowed* under tier 2 provided that a number of specific requirements are satisfied. The most important function of the tier 2 requirements is to ensure that an evaluation of alternatives (e.g., source elimination or reduction options) is conducted. Such an evaluation demonstrates that the proposed water quality degradation is necessary because reasonable non-degrading or less-degrading alternatives are not available.

The most important function of the tier 2 requirements is to ensure that an evaluation of alternatives (e.g., source elimination or reduction options) is conducted. Such an evaluation must demonstrate that the proposed water quality degradation is necessary because reasonable non-degrading or less-degrading alternatives are not available.

A base level of protection, known as tier 1, applies to all surface waters. Under this level of protection, existing in-stream water uses, and the level of water quality necessary to protect existing uses, must be maintained and protected. Such protection must be afforded whether or not such existing uses are also designated uses.

A number of states, on their own initiative, have implemented an extra level of antidegradation protection. This level, sometimes referred to as a tier 2.5. provides a level of protection for high quality waters that is intermediate between tiers 2 and 3. This level of protection differs from state-to-state, and is not required by, or referenced in, the federal water quality standards regulation.

Implementation of antidegradation complements the process by which designated uses and criteria are established and implemented. Antidegradation provides a mechanism to evaluate proposed activities and to appropriately limit deterioration of existing water quality. Although the designated uses and criteria are an important part of the water quality standard for a segment, the baseline for antidegradation reviews is not the designated uses and criteria, but rather *existing water quality and existing* uses. Just as states carefully review proposed activities to ensure that designated uses and water quality criteria will be attained, under antidegradation, proposed activities that would lower existing water quality are carefully reviewed to ensure that the state antidegradation policy will be satisfied. The antidegradation policy is an integral part of a segment's water quality standards and an under-utilized tool.

Why has EPA Region VIII developed this antidegradation guidance?

At this point in time, antidegradation can best be characterized as an emerging program within EPA Region VIII. For example, several of the six Region VIII states have not yet fully developed written procedures for use in implementing their antidegradation policies.

Not surprisingly, implementation of antidegradation in these states has not been active or consistent. EPA views such a lack of adequate antidegradation implementation procedures as a serious deficiency in state water quality standards programs, and has disapproved several states' water quality standards over this issue. The Region believes that issuing clear guidance will assist these states to establish effective implementation procedures.

Although several of the Region VIII states have, to varying degrees, documented implementation procedures for antidegradation, the Region believes that these existing implementation procedures can be improved. The Region has recommended that these states consider additional refinements to their antidegradation procedures, This guidance includes a number of recommendations that may assist these states in achieving beneficial improvements to their existing programs.

Finally, a number of the Indian tribes[1] located in Region VIII have expressed interest in qualifying for the water quality standards program and establishing standards pursuant to CWA authority (see 56 FR 64876, December 12, 1991). Because tribal standards programs will be subject to the same federal requirements as state programs, such tribes will also need to develop and implement antidegradation policies and procedures. The model antidegradation procedure included in this guidance should help tribes to develop effective antidegradation implementation procedures.

What are the specific objectives of this guidance?

The specific objectives of this document are:

(1) to provide a model antidegradation implementation procedure for use by the states and Indian tribes located in EPA Region VIII;

(2) to identify the specific issues that must be addressed and resolved by state and tribal antidegradation policies and procedures;

(3) to review historical and other background information relative to antidegradation; and

(4) to characterize the range of approaches used by states to date on a number of key issues.

[1] Consistent with 40 CFR 131.3(j). the term "state" in this guidance includes both states and Indian tribes that administer CWA Sec. 303(c) water quality standards programs.

How is this guidance organized?

This chapter of the guidance describes basic antidegradation concepts, why Region VIII has developed implementation guidance, and the specific objectives of this document. Chapter 2 presents the model antidegradation implementation procedure developed by EPA Region VIII for use by states and tribes. Chapter 3 identifies the priority issues that must be addressed and resolved by state and tribal antidegradation procedures to obtain EPA Region VIII approval. Chapter 4 provides additional discussion of the specific antidegradation implementation approaches incorporated into the model implementation procedure. Appendices 1 and 2 present relevant background information and a review of state implementation approaches currently in use. Finally. Appendix 3 includes EPA Region VIII responses to major comments and questions received regarding several earlier drafts of this guidance.